Enigma™

Multi-point correlation system for leak location

Enigma **is a state-of-the-art digital correlation logging system for determining the location of leaks in buried water pipes. *Enigma* combines noise logging and noise correlation into one operation to provide improved operational efficiency.**

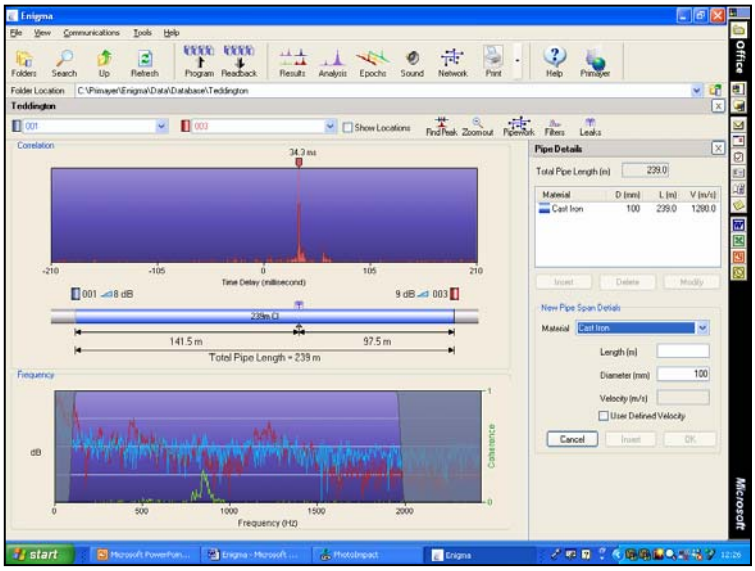
Enigma offers the following:

- Leak detection and location in one operation
- Optimum performance in difficult leak detection situations
- Avoids costly night-time working
- Three sound samples separate genuine usage from leakage
- Latest 24-bit technology
- Finds multiple leaks
- Powerful analysis software

Multi-point network correlation

Enigma loggers are deployed at multiple positions, typically on valves or hydrants, during normal working hours. They maybe programmed for either daytime or night-time operation. The loggers record the actual leak sound. When retrieved the leak sound is transferred to the host software where it is processed to display all leak positions between loggers.

Programming and data readback utilises optical and USB communications to ensure rapid operation.



Primayer

Primayer Limited
Primayer House, Parklands Business Park, Denmead,
Hampshire, PO7 6XP, United Kingdom
Telephone: +44 (0)23 9225 2228 Fax: +44 (0)23 9225 2235
E-mail: sales@primayer.com Internet: www. primayer.com

Primayer
AQUA TECHNOLOGY SOLUTIONS

Optimum leak sensing

Use overnight provides ideal conditions for leak detection. This is because background acoustic noise from traffic, water usage and other sources, is lowest and, at the same time, water system pressure can be higher which greatly aids leak sound propagation.

Product features

- Up to 8 loggers per system
- Loggers programmed via PC or default in the Communications Case
- Fast logger communications
- Loggers powered for 5 years
- Loggers submersible to IP68

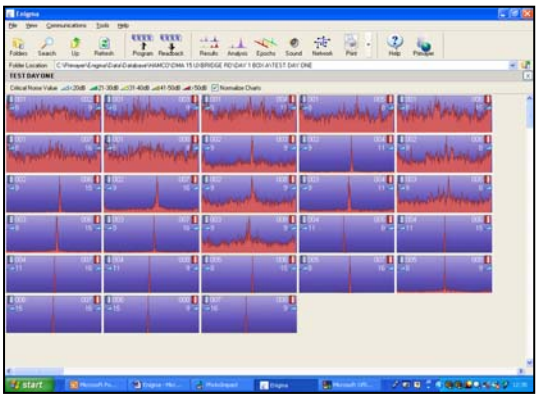
Host software features

- Advanced correlation, coherence and filtering
- Windows® 'Explorer' style browser
- Logger positions optionally shown on pipe schematic or digital map
- Automated velocity measurement

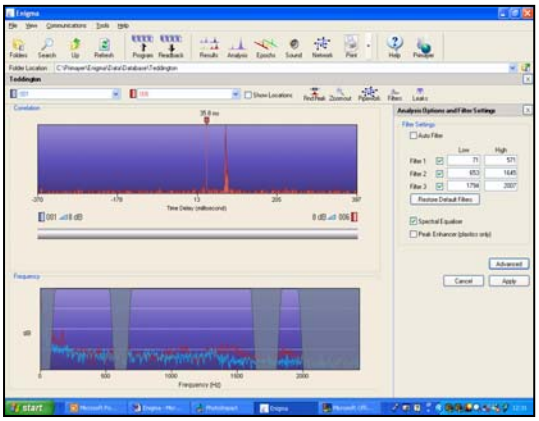
Enigma hydrophone version

Separating genuine water usage

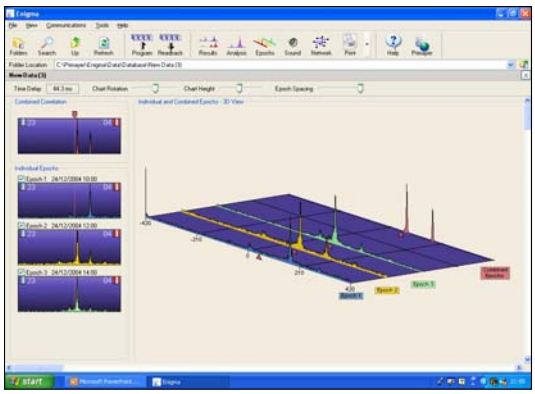
Each logger records during three sample periods, typically spaced one hour apart. A leak noise is always constant and so if the correlation peak is not present during all three samples then it is due to water use and not leakage.



Automated thumbnail display of preliminary results from up to 28 possible combinations



Multiple filter and auto-filter options



Multiple epochs to determine if leakage or legitimate use of water

Primayer
AQUA TECHNOLOGY SOLUTIONS

Primayer Limited
Primayer House, Parklands Business Park, Denmead, Hampshire PO7 6XP, United Kingdom
Tel: +44 (0)23 9225 2228 Fax: +44 (0)23 9225 2235 Email: sales@primayer.com Internet: www.primayer.com